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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,636	07/26/2004	Serena Giori		4635

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07/13/2006

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EXAMINER

BRUENJES, CHRISTOPHER P

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 07/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/710,636

Applicant(s)

GIORI ET AL.

Examiner

Christopher P. Bruenjes

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Van Andel (WO 2000/28807 A1).

Regarding claims 1-3, Van Andel anticipate a container for water (p.4, 1.20-25). The wall of said container comprises a non-porous membrane made of a polymeric material comprising hydrophilic units and having the ability to transmit water vapor by a solution/diffusion mechanism (p.4, 1.20-25), in which the membrane comprises a polyether amide with aliphatic ether forming the hydrophilic units. Note the preamble limitation that the container is "a self-cooling" container is given little patentable weight because the limitation merely recites the purpose or intended use of the claimed invention and the purpose or intended use does not result in any additional structural limitations not taught in the body of the claim. See MPEP

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2111.02. Note also the whereby clause recited in the first claim, "whereby water vaporization inside said container produces a cooling effect capable of maintaining the temperature of said beverage below ambient when relative humidity is below 100%" describes an intended purpose or use that does not result in any additional structural limitations not taught in the rest of the claim. Therefore, the clause is determined to be equivalent to a functional limitation in an article claim. Thus, since the container of Van Andel contains water and the wall of the container comprises hydrophilic units having the ability to transmit water vapor by a solution/diffusion mechanism, the container meets the structural limitations and has the ability to perform the whereby clause so it anticipates the claim. See MPEP 2111.04 and 2114. Regarding claim 4, a porous fabric is laminated to the outer surface of said membrane (p.10, 1.12-15).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at

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the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nomi (USPN 4,368,766) in view of Steenblock et al (USPN 5,703,161).

Nomi teaches a self-cooling container for water and water-based beverages (col.1, 1.5-8). The wall of said container comprises a water repellant water vapor permeable polymeric material such as microporous polytetrafluoroethylene, which has the ability to transmit water vapor by a solution/diffusion mechanism, whereby water vaporization inside said container produces a cooling effect capable of maintaining the temperature of said beverage below ambient when relative humidity is below 100% (col.1, 1.9-32 and col.1, 1.63 - col.2, 1.5). A porous

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fabric is laminated to the outer surface and/or inner surface of said membrane (col.3, 1.1-6).

Nomi fails to teach using a non-porous membrane as the polymeric material that has the ability to transmit water vapor by a solution/diffusion mechanism. However, Steenblock et al teach that water vapor permeable waterproof films are formed that is either porous or non-porous. Steenblock et al specifically teaches porous films such as microporous polytetrafluoroethylene and non-porous films made of polyetherester block copolymers (col.1, 1.13-20). Steenblock et al further teach that water vapor permeable waterproof films should satisfy a number of different requirements, which include high water vapor permeability, imperviousness to bacteria, and capable of being bonded to fabrics (col.1, 1.44-60). Steenblock et al teach that a membrane comprising polyether block amide satisfies the requirements and overcomes the disadvantages of other known films such as microporous polytetrafluoroethylene (col.2, 1.21-47). Therefore, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to substitute a non-porous membrane comprising polyether block amide, which includes hydrophilic units for a microporous polytetrafluoroethylene because it overcomes the disadvantages of the microporous

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polytetrafluoroethylene such as a lack of imperviousness to bacteria and microbes and poor processability, as taught by Steenblock et al. Nomi and Steenblock et al are analogous insofar as both references are reasonably pertinent to the particular problem with which the inventor was concerned, which is forming water vapor permeable waterproof films for forming articles.

Thus, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to substitute the water vapor permeable waterproof non-porous membrane comprising polyether block amide, which includes hydrophilic units of ether, of Steenblock et al for the water vapor permeable waterproof porous membrane of Nomi in order to provide the self-cooling water container of Nomi with a membrane that has improved imperviousness to bacteria and microbes and processability, as taught by Steenblock et al.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Van Andel (USPN 6,679,991) is the US Patent equivalent of the cited published PCT application; Hottner (USPN 6,716,778) and Kinkelin et al (US 2002/0161674) teach the claimed non-porous membrane; Allenbach

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(USPN 2,865,420) teaches a self-cooling container; and Wenzel (USPN 2,467,792) and Luetsch (USPN 5,983,662) were cited in Applicant's specification.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P. Bruenjes whose telephone number is 571-272-1489. The examiner can normally be reached on Monday thru Friday from 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christopher P Bruenjes
Examiner
Art Unit 1772

CPB *CPB*
July 7, 2006

Harold Pyon
HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

7/7/06